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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,447	09/14/2005	Chiaki Sasaoka	029437-0111	5540
FOLEY AND LARDNER LLP SUITE 500			EXAMINER	
			ZHANG, YUANDA	
3000 K STREE WASHINGTO			ART UNIT	PAPER NUMBER
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			MAIL DATE	DELIVERY MODE
			11/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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ŀ		Application No.	Applicant(s)
		10/549,447	SASAOKA, CHIAKI
	Office Action Summary	Examiner	Art Unit
		Yuanda Zhang	2828
Period fo	The MAILING DATE of this communication ap	pears on the cover sheet w	ith the correspondence address
A SH WHIC - Exte after - If NC - Failu Any	CORTENED STATUTORY PERIOD FOR REPLICHEVER IS LONGER, FROM THE MAILING Densions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. Depriod for reply is specified above, the maximum statutory period period for reply will, by statut reply received by the Office later than three months after the mailing department term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUN 136(a). In no event, however, may a will apply and will expire SIX (6) MO te, cause the application to become A	CATION. reply be timely filed  NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
Status			
1)	Responsive to communication(s) filed on <u>Sep</u>	ntember 11 2007	
′=	' ' -	s action is non-final.	
3)	Since this application is in condition for allows		ters, prosecution as to the merits is
	closed in accordance with the practice under	Ex parte Quayle, 1935 C.I	D. 11, 453 O.G. 213.
Disposit	ion of Claims		
5)	Claim(s) <u>1-3</u> is/are pending in the application. 4a) Of the above claim(s) <u>7-12</u> is/are withdraw Claim(s) is/are allowed. Claim(s) <u>1-3</u> is/are rejected. Claim(s) is/are objected to		
8)□	Claim(s) are subject to restriction and/	or election requirement.	
Applicat	ion Papers	•	,
9)[	The specification is objected to by the Examin	er.	
10)	The drawing(s) filed on is/are: a) ac	cepted or b) objected to	by the Examiner.
	Applicant may not request that any objection to the		, ,
	Replacement drawing sheet(s) including the correct	·	• • • • • • • • • • • • • • • • • • • •
11)	The oath or declaration is objected to by the E	xaminer. Note the attache	d Office Action or form PTO-152.
Priority (	under 35 U.S.C. § 119	•	·
-	Acknowledgment is made of a claim for foreign  All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documen  2. ☐ Certified copies of the priority documen  3. ☐ Copies of the certified copies of the priority documen  application from the International Burea	its have been received. Its have been received in Apprity documents have been	Application No
* (	See the attached detailed Office action for a lis	t of the certified copies no	received.
Attachmen	nt(s)		
2)	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mait Date	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application

Application/Control Number:

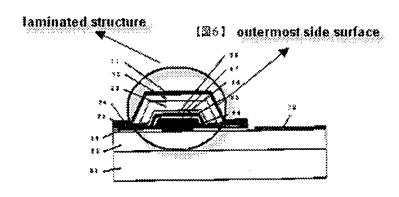
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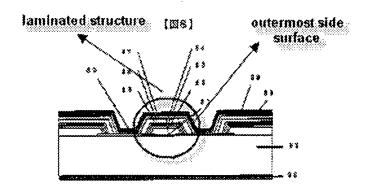
### **DETAILED ACTION**

### Response to Arguments

- 1. Applicant's arguments filed 09/11/07 have been fully considered but they are not persuasive.
- 2. In response to Applicant's argument of lacking the limitation of "the outermost side surfaces of the laminated layers along the direction of the resonator of the semiconductor laser are inclined with respect to the GaN-based semiconductor substrate", the Examiner interprets the outermost side surface of the laminated layers to be the side surface of electrode 71 from figure 6 which is angled or inclined with respect to the substrate 61 (see below). In addition, figure 8 also shows the same concept in which the outermost side surface of the laminated layers is inclined surface of mask layer 80.

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# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Nidou et al (JP 2001-320120 A).

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- 5. In re claim 1, with reference to figure 6, Nidou et al disclose a semiconductor laser comprising a GaN-based semiconductor substrate (n mold GaN contact layer 62) and laminated layers (layers 64-71) formed on the GaN-based semiconductor substrate which include a GaN-based semiconductor clad layer (AlGaN cladding layer 65) containing Al and an active layer (barrier layer 67) formed thereabove, wherein the outermost side surfaces of the laminated layers along the direction of the resonator of the semiconductor laser are inclined with respect to the GaN-based semiconductor substrate in such a direction that a resonator width is decreased from the GaN-based semiconductor substrate side to the upper portion of the laminated layers (figure 6 and Paragraph [0052]).
- 6. In re claim 2, Nidou et al disclose wherein masks (63) are formed on the GaN-based semiconductor substrate (62) and the laminated layers (layers 64-71) are formed above the masks so that the side surfaces of the laminated layers along the direction of the resonator are from the grown surfaces of the semiconductor layers which have been selectively grown from the masks (Paragraph [0052]).
- 7. In re claim 3, Nidou et al disclose wherein the end surfaces of the resonator of the semiconductor laser are cleavage planes of the GaN-based semiconductor substrate and the laminated layers (Paragraph [0064]).

#### Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuanda Zhang whose telephone number is 571-270-1439. The examiner can normally be reached on Monday-Thursday, Alternating Fri 8:30am-6:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun Harvey can be reached on 571-272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YZ 11/07/07

